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Title:
CELL UNIT OF SOLID POLYMER ELECTROLYTE MEMBRANE FUEL CELL

<From line 17 of lower right column at page 2 to line 2 of upper left column at page 3>

The unit cell 10 according to the present embodiment is formed by arranging a plurality of assemblies 12 in the surface direction of two insulating plates 11A, 11B, and sandwiching the assemblies 12 by the insulating plates 11A, 11B. Each of the assemblies 12 is formed by connecting gas diffusion electrodes 14A, 14B on both sides of the solid polymer electrolyte membrane 13.

<From line 10 of upper right column at page 3 to line 7 of lower left column at page 3>

Each of the portions of the isolating plates 11A, 11B connected to the gas diffusion electrodes 14A, 14B has oxygen supply grooves 17 along the surface of the gas diffusion electrode 14A, or hydrogen supply grooves 18 and water supply grooves 19 along the surface of the gas diffusion electrode 14B. That is, the solid polymer electrolyte membrane fuel cell has the gas diffusion electrode 14A as an oxygen electrode, and the gas diffusion electrode 14B as the hydrogen electrode. The water supply grooves 19 are formed on the side of the hydrogen electrode in order to flow water for cooling and humidifying the solid polymer electrolyte membrane 13.

Further, the electricity generated at each assembly 12 is collected in series per cell unit 10. That is, the

assemblies 12 are connected in series by connection cables 20 such that the hydrogen electrode and the oxygen electrode are arranged alternately. The ends of the connection cables 20 are connected to power collectors 21A, 21B.